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#### REMARKS

Applicants appreciate the detailed examination evidenced by the Office Action dated June 25, 2009. In response, Applicants have provided remarks herein detailing why the cited references do not disclose all the recitations of the pending claims. Applicants respectfully submit that the claims as presented are patentable over the cited references and are in condition for allowance for at least the following reasons.

## Independent Claim 1 is patentable

The Office Action rejects Claims 1-32 under 35 U.S.C. §103 as being unpatentable over U.S. Published Patent Application No. 2005/0010638 to Richardson et al. ("Richardson") in view of <u>DSL Evolution-Architecture Requirements for the Support of QoS Enabled IP Services, Revision 8</u> ("DSL Evolution") and in further view of U.S. Patent No. 5,611,038 to Shaw et al. ("Shaw"). (Office Action, page 2.)

## Claim 1

Applicants respectfully submit that Claim 1 is patentable for at least the reason that Richardson, DSL Evolution and Shaw, alone or in combination, do not disclose or suggest several of the recitations therein. For example, Claim 1 recites:

A videoconferencing method using Quality of Service (QoS) and/or bandwidth allocation in a Regional/Access Network (RAN) that provides end-to-end transport between an Application Service Provider (ASP) and Customer Premises Equipment (CPE), the method comprising:

receiving, by the ASP, a request for a videoconference designating a plurality of participants from one of the plurality of participants;

requesting capabilities associated with at least one of the participants from the RAN;

selecting a desired QoS and/or bandwidth allocation based on the capabilities;

requesting, by the ASP, the desired QoS and/or bandwidth allocation for the videoconference for the plurality of participants from the RAN using at least one Application Programming Interface (API) call responsive to the received request for a videoconference; and

activating the videoconference for the plurality of participants using the desired QoS and/or bandwidth allocation,

wherein the API includes an Application-to-Network Interface (ANI) that is defined between the RAN and the ASP. (*Emphasis added*.)

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In rejecting Claim 1, the Office Action states that Richardson discloses:

requesting, by the ASP (i.e. videoconference server), a desired QoS and/or bandwidth allocation for the videoconference for the plurality of participants from the RAN using at least one call (i.e. policy server including policy information for a requested videoconference session) responsive to the received request for a videoconference (section 0067-0068; 0103; 0138; 0201; 0205-0206).

(Office Action, pages 2-3.) Applicants respectfully submit that the cited portions of Richardson do not disclose or suggest "requesting, by the ASP, a desired QoS and/or bandwidth allocation for the videoconference...from the RAN," as recited in Claim 1.

For example, paragraphs 0067-0068 appear to describe a network architecture database that may be used by a videoconference server to "effectively manage the bandwidth and quality of service." (Richardson, paragraph 0067.) Paragraph 0103 describes that the server "checks the policy on videoconference sessions on the WAN." Paragraph 0138 describes a user interface in the videoconference client application and a messaging system that specifies communication between the server and the other client's applications. In paragraph 0201, Richardson describes that the client application queries the server for a list of available candidates. In paragraphs 0205-0206, Richardson describes a user interface and messaging system "that allows a server to control video encoding parameters of each individual client based on messages sent from a videoconference controlling client or network."

Accordingly, Applicants respectfully submit that the cited portions of Richardson, as described above, appear to be wholly silent regarding a request by the ASP from the RAN. Accordingly, in contrast with the Office Action allegation, Richardson does not disclose or suggest "requesting, by the ASP, a desired QoS and/or bandwidth allocation for the videoconference...from the RAN," as recited in Claim 1.

Additionally, the Office Action states that Shaw discloses "requesting capabilities associated with at least one of the participants from the RAN (col. 14, lines 12-16). (Office Action, page 4.) Applicants respectfully submit that Shaw appears to describe a source teleconference controller 159 that prepares video presentation material for the meeting and that pre-transmits the meeting materials to a destination controller 161, which stores the meeting materials at a local database storage. (See Shaw, column 13, lines 37-45.) The cited

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portion of Shaw describes that the "conference controller 159, 161 can then consult with conferees 163, 165 to determine a preferred image/video display format, which can be either high quality video 150, slow motion video 148, still image 152 or high quality audio 146." (Shaw, column 14, lines 12-16.) As an initial matter, Applicants note that neither the source controller 159 nor the destination controller 161, alone or in combination, comprise a "RAN", as recited in Claim 1. Instead, each controller appears to manage local aspects of the video conference. Additionally, the portion relied upon by the Office Action appears to be silent as to requesting "capabilities" of the conferees. Instead, Shaw appears to describe that the display format is determined as a preference among predefined choices. In this regard, Shaw does not disclose or suggest "requesting capabilities associated with at least one of the participants from the RAN," as recited in Claim 1.

The Office Action also states that Shaw discloses "selecting a desired QoS and/or bandwidth allocation based on the capabilities (col. 13, line[s] 34 – col. 14, line 51)." (Office Action, pages 4-5.) As Shaw does not disclose or suggest requesting capabilities, Shaw necessarily does not disclose or suggest "selecting...based on the capabilities," as recited in Claim 1.

Additionally, even if Shaw were to be interpreted as describing requesting capabilities, which it does not, the cited portion of Shaw appears to be wholly silent as to "selecting a desired QoS and/or bandwidth allocation based on the capabilities," as recited in Claim 1. Instead, Shaw appears to describe that bandwidth allowance is typically determined by consulting the local CO switch regarding the network traffic and line condition. (*See, e.g.*, Shaw, column 14, lines 9-12.) Thus, Shaw appears to teach away from "selecting a desired QoS and/or bandwidth allocation based on the capabilities" requested of the participants by the RAN, as recited in Claim 1. Accordingly, Applicants note that none of the cited portions of Shaw disclose what is alleged in the Office Action. Further, the Office Action concedes that Richardson and DSL Evolution do not provide the above described teachings that are missing from Shaw.

Applicants respectfully submit that Claim 1 is patentable over Richardson, DSL Evolution and Shaw, alone or in combination, for at least these reasons and respectfully request the allowance thereof.

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## Independent Claims 33, 41 and 47 are Patentable

The Office Action rejects Claims 33-51 under 35 U.S.C. §103 as being unpatentable over Richardson in view of DSL Evolution. (Office Action, page 8.)

#### Claim 41

Applicants respectfully submit that Claim 41 is patentable over Richardson and DSL Evolution for at least similar reasons to those discussed above regarding Claim 1. For example, as discussed above regarding Claim 1, Richardson and DSL Evolution, alone or in combination, do not disclose or suggest "means for requesting a desired QoS and/or bandwidth allocation for the videoconference for the plurality of participants from the RAN using at least one Application Programming Interface (API) call responsive to the received request for a videoconference," as recited in Claim 41.

Additionally, Richardson and DSL Evolution, alone or in combination, do not disclose or suggest "means for authenticating the ASP with the RAN," as recited in Claim 41. The Office Action further cites "Richardson:authentication -> see membership of each participant and public/private call: section 0063; 0065." (Office Action, page 11.) Richardson appears to describe that a membership database 314 includes membership information corresponding to each user that has logged on. (See, Richardson, paragraph 0063.) The description regarding members appears to be wholly silent regarding authentication, much less authentication of an ASP. Applicants respectfully note that the claim recitations corresponding to the ASP are distinct from those corresponding to participants, which might more accurately read on users described in Richardson.

Richardson further describes information on each videoconference session currently taking place including "public/private call (can others join?)" (Richardson, paragraph 0065.) Applicants respectfully submit that whether others can join is not synonymous with any authentication, much less "authenticating an ASP with a RAN," as recited in Claim 41. Accordingly, Richardson does not disclose or suggest that which is alleged by the Office Action.

Additionally, DSL evolution does not provide the teachings that are missing from Richardson. For example, in contrast with the Office Action allegation, DSL Evolution

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appears to teach away from the above recited portion of Claim 41. For example, regarding the policy based profiles, DSL Evolution states "[n]o single ASP authenticates the ASP access session, so a profile for that session is put together by the Policy Repository and is based on various subscriptions associated with that access session." (DSL Evolution, Section 5.3.2, page 32.) In this regard, Richardson and DSL Evolution, alone or in combination, do not disclose or suggest "means for authenticating the ASP with the RAN," recited in Claim 41. Accordingly, Applicants respectfully request the allowance of Claim 41.

### Claims 33 and 47

Applicants respectfully submit that Claim 33 is patentable for at least the reason that Richardson and DSL Evolution, alone or in combination, do not disclose or suggest several of the recitations therein. In rejecting Claim 33, the Office Action states, in part, that Richardson discloses "establishing, by the RAN, a control signal application flow, a video application flow, and an audio application flow for the identified participants (section 0067-0068; 0142-0147; 0153; 0205-0206)." (Office Action, page 9.) Applicants respectfully submit that the cited portions do not disclose or suggest that the RAN establishes "a control signal application flow, a video application flow and an audio application flow for each of the identified participants," as recited in Claim 33. Instead, the cited portions of Richardson describe that the server-client provide for resolution and/or frame rate adjustment. (See, e.g., Richardson, paragraphs 0142 and 0205.) For example, Richardson describes that "the present invention provides a messaging system that allows a server to control video encoding parameters of each individual client based on messages sent from a videoconference session controlling client or network equipment." (Richardson, paragraph 0205.) Additionally, paragraphs 0067-0068 appear to describe a network architecture database that may be used by a videoconference server to "effectively manage the bandwidth and quality of service." (Richardson, paragraph 0067.) Further, paragraph 0153 of Richardson describes that the "client application is responsible for interacting with a user, exchanging of multimedia content with other client applications, and for managing calls with the server application." Yet further, paragraphs 0142-0147 of Richardson do not appear to address any involvement with the RAN and instead appear to be directed to server-client messages.

The Office Action further states DSL Evolution discloses the above claim recitation at Section 5.3.1-5.3.2.3, pages 28-34. (Office Action, page 10.) Applicants respectfully submit

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that, in contrast with the Office Action allegation, DSL Evolution describes a QoS architecture including two phases of QoS mechanisms. (DSL Evolution, Section 5.3, page 28.) Neither of the QoS mechanisms described in the cited portions of DSL Evolution disclose or suggest that the RAN establishes a control signal flow, a video application flow and an audio application flow. Moreover, DSL Evolution states that "[e]nd-to-end QoS admission control is not required in this phase. Admission control for access network QoS (bandwidth on demand) is required." (DSL Evolution, Section 5.3.2.3, page 34.) In this regard, the RAN as described in the cited portions does not appear to establish the various flows for each of the identified participants, as recited in the claim. Accordingly, Richardson and DSL Evolution, alone or in combination, do not disclose or suggest "establishing, by the RAN, a control signal application flow, a video application flow and an audio application flow for each of the identified participants," as recited in Claim 33. For at least these reasons, Applicants respectfully request that the rejection of Claim 33 be withdrawn.

The Office Action rejects Claim 47 under the same rationale as Claim 33. Applicants respectfully submit that Claim 47 is patentable over Richardson and DSL Evolution, alone or in combination, for at least similar reasons to those discussed above regarding Claim 33. Accordingly, Applicants respectfully request the allowance of Claim 47.

# Dependent Claims 3-32, 34-40, 42, 43, 45, 46 and 48-51 are patentable

Applicants submit that dependent Claims 3-32, 34-40, 42, 43, 45, 46 and 48-51 are patentable over Richardson and DSL Evolution at least by virtue of the patentability of independent Claims 1, 33, 41 and 47, respectively. In addition, various ones of the dependent claims are separately patentable. For example, dependent Claim 4 further recites that:

the method further comprises receiving confirmation of the request for a desired QoS and/or bandwidth allocation from the RAN and wherein requesting a desired QoS and/or bandwidth allocation comprises *transmitting a modify* QoS and/or bandwidth allocation message including updated QoS and/or bandwidth allocation information for the videoconference for the plurality of participants *from the ASP*. (*Emphasis added*.)

The Office Action cites Richardson at paragraphs 0205-0206 and 0211-0212 and DSL Evolution at Section 2.2, pages 2-4 and Sections 5.1-5.1.1, pages 26-27 as teaching the recitations of Claim 4. Applicants respectfully submit that, in contrast with the recitations of Claim 4, the cited portions of Richardson appear to describe that the clients request

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modifications from the server. For example, Richardson, at paragraph 0211 describes "the message "MSG-\_WINDOW\_SWITCH" is sent from a client (e.g., session controller) to the server 205." Accordingly, Richardson does not disclose or suggest "receiving confirmation of the request for a desired QoS and/or bandwidth allocation from the RAN" or "transmitting a modify...from the ASP," as recited in Claim 4.

The cited portions of DSL Evolution appear to be wholly silent as to "transmitting a modify QoS and/or bandwidth allocation message...from the ASP," as recited in Claim 4. For at least these reasons, dependent Claim 4 is separately patentable over Richardson and DSL Evolution, alone or in combination. Accordingly, Applicants respectfully request the allowance of dependent Claim 4.

Regarding dependent Claim 7, the Office Action refers to paragraph 0205 of Richardson. Applicants respectfully submit that Claim 7 recites, in part "after activating the videoconference: deactivating the videoconference for the plurality of participants; and notifying the RAN that the desired QoS and/or bandwidth allocation for the videoconference is no longer desired." Applicants respectfully submit that paragraph 0205 of Richardson is devoid of any reference related to the recitations of Claim 7. For example, Richardson at paragraph 205, appears to describe "a messaging system that allows a server to control video encoding parameters of each individual client based on messages sent from a videoconference session controlling client or network equipment." Accordingly, Claim 7 is separately patentable over Richardson and DSL Evolution, alone or in combination. If the Examiner maintains this rejection, Applicants respectfully request that a subsequent rejection include, with specificity, which portion of paragraph 0205 provides the teachings related to the recitations of Claim 7 that are relied upon in the rejection.

Additionally, dependent Claim 9 depends from Claim 7 and is thus separately patentable for at least the same reasons.

Regarding dependent Claim 10, the Office Action refers to paragraphs 0063; 0065; 0138; 0164-0166; 0186; 0207 of Richardson and Section 4.2.7.2 at page 24 of DSL Evolution. Applicants respectfully submit that Claim 10 recites, in part:

wherein the videoconference has an associated application flow for video and an associated application flow for audio and wherein requesting a desired QoS and/or bandwidth allocation comprises requesting a different desired QoS and/or bandwidth allocation for the video application flow and the audio application flow. (Emphasis added.)

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In contrast with the Office Action allegation, the cited portions of Richardson do not disclose or suggest "requesting a different desired QoS and/or bandwidth allocation for the video application flow and the audio application flow," as recited in Claim 10. The cited portions of Richardson appear to merely discuss different codecs for video and audio layering and synchronizing, but do not appear to discuss the recitations of Claim 10. The cited portions of DSL Evolution appear to describe a list of capabilities corresponding to a routing gateway. For at least these reasons, Claim 10 is separately patentable over Richardson and DSL Evolution, alone or in combination. If the Examiner maintains this rejection, Applicants respectfully request that a subsequent rejection include, with specificity, which of the cited portions provide the teachings related to the recitations of Claim 10 that are relied upon in the rejection. Additionally, dependent Claims 11-29 depend from Claim 10 and are thus separately patentable for at least the same reasons.

Applicants respectfully submit that the above discussed dependent claims are merely representative of all of the dependent claims and that numerous other of the dependent claims are separately patentable as well. Applicants will refrain from discussing independent patentability regarding other of the dependent claims in the interest of brevity, but reserve the right to do so in future communications if necessary.

# Provisional Obviousness Type Double Patenting Rejection

The Office Action provisionally rejects Claims 1-51 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-55 of copending Patent Application No. 10/756,790 and Claims 1-44 of copending Application No. 10/716,051. (Office Action, page 13.) The Office Action further states that the Examiner takes Official Notice that the limitation "a videoconference using QoS and/or bandwidth allocation in a RAN" is well known in the art. (Office Action, pages 13-14.) The Office Action states that this is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. (Office Action, page 14.)

In response, Applicants respectfully request that the provisional double patenting rejection be held in abatement until such time as the present application is indicated as being in condition for allowance, at which time the Applicants may file a terminal disclaimer to overcome the double patenting rejection, if necessary. Further, Applicants respectfully defer

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discussion of whether this is an appropriate use of official notice and submit that this issue is most in light of Applicants' willingness to file a terminal disclaimer if necessary.

#### Conclusion

As all of the claims are now in condition for allowance, Applicants respectfully request allowance of the claims and passing of the application to issue in due course.

Applicants urge the Examiner to contact Applicants' undersigned representative at (919) 854-1400 to resolve any remaining formal issues.

Respectfully submitted,

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#### CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with \$ 1.6(a)(4) to the U.S. Patent and Trademark Office on September 23, 2009.

Michele P. McMahan